

The Sooty Falcon *Falco concolor* in the southern Kalahari

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The Sooty Falcon *Falco concolor* is a species which breeds in North Africa (Dowsett *in* Snow 1978), but while it is known to winter in the southern Ethiopian Region, knowledge of its exact movements is severely limited. The main wintering area is the dry savannah of Madagascar (Brown & Amadon 1968), but there are also regular records for coastal regions in eastern (Penry 1979a) and southeastern Africa (Clancey 1969). There are very few records of this species being observed inland in southeastern Africa, the southernmost being in Zambia (Penry 1979a). Thus the present observation, which was made on 1 March 1979 and was approximately 42 km south of Unions End (the point where the international boundaries of South Africa, Botswana and Namibia meet), represents the southernmost inland record in Africa for *F. concolor*.

During a routine raptor census drive through the dunes in the Kalahari Gemsbok National Park we flushed a falcon that had evidently been resting in the canopy of a large thorn tree. Even in flight the bird was immediately suspected to be a new species to the area. It flew with a strong heavy flight which was almost Hobby *F. subbuteo*-like, but the wings appeared relatively longer (See Plates) and more powerful (perhaps a slower stroke) and the back appeared more rounded (hunch-backed). Fortunately the bird settled within 200 m in a dead tree, where we were able to observe it in detail from about 50 m at 160× magnification. The bird was uniformly mid-grey in colour. The wings when folded, extended just beyond the tail (See Plates). The cere and preorbital skin were bright yellow and separated by a distinct black area which formed a definite vertical patch, as opposed to only the lores being black as in other species. No longitudinal markings were seen on the chest. The feet were orange-yellow. Here we would like to draw attention to another field character which is not mentioned elsewhere but is evident in the photograph – namely that the bird has larger feet than other similar falcons. The long toes are possibly an adaptation to feeding on bats in flight, a habit which has now been recorded for *concolor* in South Africa (Young, Nicholls, Mendelsohn 1979).

It is evident that *concolor* differs widely in its habits, habitat and feeding behaviour while in its summer and winter ranges. Various descriptions as crepuscular, almost crepuscular and feeding throughout the day (Clapham 1964), its habits probably change according to the availability of prey. The prey ranges from bats and migratory birds, to lizards, termites (Penry 1979a) and insects. All prey is recorded as being taken on the wing. The habitats described vary from totally barren Sahara desert (Booth 1961), peri-urban areas, coastal areas and associations with large tracts of water (Penry 1979b) to savannah or scrub-savannah in Madagascar (Brown & Amadon 1968). The present observation of *concolor* was made soon after we had driven through undulating grassland and had entered a strip of *Acacia erioloba* savannah. In this context, savannah refers to trees being 6–10 m in height and about 40–100 m apart (open to sparse woodland savannah).

The inland movements of *concolor* to and from its wintering areas have

been subject to speculation (Penry 1979b). They are difficult to determine because of the paucity of recorded observations. In Zambia, Penry has recorded 2 movements: October/November and March/April. In South Africa we now have what appear to be regular records from late December (Clancey 1969) to 10 April along the eastern coastline, from Ndumu on the Natal coast in the north to Dwesa on the Transkei coast in the south (Brooke 1978).

The presence of this species in the southern Kalahari on 1 March provides the sort of single record that further confuses an already unclear picture. If it was a lone vagrant, does it represent the southernmost bird of an inland movement through Zambia? The senior author has been conducting quarterly censuses of raptors in the area for 6 years without any previous record, so it seems reasonable to say that the bird is at least uncommon. It was recorded at a time when termite eruptions occur and several migratory raptors often congregate for this food source. The habitat would appear to be similar to that of its main wintering area in the dry Madagascar savannah. Penry (1979b) has observed *concolor* at Chama in southern Zambia. Further south in Botswana there are the Okavango swamps, and from them through to the Kalahari Gemsbok Park there lies a vast region of virtually uninhabited savannah which could well act as a migration route for *concolor*. In this regard, it is interesting to note in comparison that except for a single sight record, Smithers (1964) does not record the Hobby *Falco s. subbuteo* as a bird species of Botswana. In contrast, in the adjacent Kalahari Gemsbok National Park the senior author has recorded as many as 8 at one termite eruption, as well as a great number of other single records. One can therefore conclude that we have little knowledge of whether *subbuteo* occurs in the dry savannah of Botswana and, similarly, whether *concolor* may not also have been overlooked in this region.

One wonders how *concolor* came to be overlooked in Natal until Clancey saw the first bird in 1960. If it had always been present, we doubt that the competent ornithologists of yesteryear could all have missed this species – particularly when one considers that they were quick to shoot any unknown birds. Thus we believe that there has been a change in the status of *concolor* in southern Africa.

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Brightly coloured plumage in female manakins (*Pipra*)

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Female manakins (*Pipra*) are feathered primarily in drab olives and greys and lack the contrasting bright, often glossy crown patches found in males. However, adult females with spots of brightly coloured "male-like" plumage have been previously reported in 5 of 16 recognized species of *Pipra* (*erythrocephala*, Snow 1962, Wetmore 1972; *mentalis*, Wetmore 1972; *pipra*, Zimmer 1936, Haverschmidt 1971; *aureola*, Haverschmidt 1965; *filicauda*, Schwartz & Snow 1978).

The purpose of this note is to add 5 additional species to the list of female *Pipra* that occasionally exhibit brightly coloured feathers, and to call attention to the possible genera-wide occurrence of such characters.

A pooled sample of 162 adult female *Pipra* (11 species) with complete gonad and skull ossification data from Louisiana State University Museum of Zoology was carefully examined for brightly coloured feathers on the crown,

TABLE I

Numbers (percentages) of female manakins (*Pipra*) in plumage categories (see text).

Species	Categories				Crown colour in males
	1	2	3	4	
<i>erythrocephala</i>	16 (84)	3 (16)	—	—	Yellow
<i>rubrocapilla</i> *	4 (80)	1 (20)	—	—	Scarlet
<i>mentalis</i>	13 (50)	12 (46)	1 (4)	—	Scarlet
<i>chloromeros</i> *	11 (73)	3 (20)	1 (7)	—	Scarlet
<i>pipra</i>	13 (100)	—	—	—	White
<i>isidorei</i>	3 (100)	—	—	—	Bluish-white
<i>caeruleocapilla</i> *	3 (75)	1 (25)	—	—	Light Blue
<i>coronata</i> *	33 (81)	7 (17)	1 (2)	—	Blue
<i>aureola</i>	1 (50)	—	1 (50)	—	Crimson
<i>fasciicauda</i> *	14 (64)	4 (18)	2 (9)	2 (9)	Scarlet
<i>filicauda</i>	7 (64)	3 (27)	1 (9)	—	Scarlet
Totals	119 (74)	34 (21)	7 (4)	2 (1)	

*=Females with brightly coloured feathers reported for first time.

nape and auricular region (Table 1). These feathers, often seen only after careful scrutiny, are similar in colour and glossiness to those found on respective males. Specimens were classified in 4 categories: (1) those with